

ZIMMERMANN, G. et al.
Serial No. 10/674,791

Atty Dkt: 4114-8
Art Unit: 2681

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method of controlling frequency selection in a wireless communication system in response to radar-like interference signals, comprising

a) continuously or quasi-continuously monitoring and assessing one or more frequencies with respect to a radar-indicative characteristic of the radar-like interference signals;

b) allocating a quality parameter to each assessed frequency, the quality parameter indicating a probability that the frequency is occupied by a radar-like interference signal;

c) selecting one or more frequencies in dependence on the allocated quality parameters; and

d) further monitoring one or more frequencies with respect to radar-like interference signals.

2. (Original) The method of claim 1,

wherein the quality parameter can assume one of a plurality of pre-defined values, a first value indicating that a frequency is occupied, a second value indicating that a frequency is not occupied, and a third value indicating that a frequency might be occupied.

3. (Original) The method according to claim 1,

wherein the quality parameter can assume any value between a lower quality order value and an upper quality border value.

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4.(Previously Presented) The method according to claim 1,
wherein in step c) only those frequencies are selected to which quality parameters
satisfying a threshold condition are allocated.

5. (Previously Presented) The method according to claim 1,
wherein at least step a) is performed during a normal transmission mode.

6. (Previously Presented) The method according to claim 1,
wherein at least step a) is performed prior to a normal transmission mode.

7. (Currently Amended) The method of claim 1,
wherein at least step a) is performed by a separate monitoring device (MD)-in
~~communication~~communication with at least one of an access point (AP) and a central
controller (CC) of the wireless communication system.

8. (Currently Amended) The method of claim 1,
further comprising communicating the allocated quality parameters to an access
point (AP)-or a central controller (CC)-of the same or a neighboring wireless
communication system.

9. (Previously Presented) The method of claim 1,
wherein, if at least one of the radar-like interference signals and other interference
signals are detected in step d), steps a) to c) are repeated.

10. (Previously Presented) The method to claim 1,
wherein during regular operation receive/transmit pauses are artificially created.

11. (Previously Presented) The method of claim 1,

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wherein step d) comprises periodically monitoring one or more of the selected frequencies to assess an average quality thereof.

12. (Original) The method of claim 11,
further comprising transmitting on the one or more frequencies having the highest average quality.

13. (Original) The method of claim 12,
wherein after a predefined period of time the method returns to step a).

14. (Original) The method of claim 13,
wherein for a specific transmission frequency the predefined period of time is selected in dependence on the quality parameter previously allocated to this transmission frequency.

15. (Previously Presented) The method of claim 13,
wherein the predefined period of time is selected additionally in dependence on a system traffic load or the transmission quality of the currently used transmission frequency.

16. (Previously Presented) The method of claim 1, wherein prior to switching from a first transmission frequency to a second transmission frequency, the second transmission frequency is subjected to at least steps a) and b).

17. (Currently Amended) A computer program product comprising program code executable by a processor for performing the steps of claim 1 when the product is run on a computer.

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- a) continuously or quasi-continuously monitoring and assessing one or more frequencies with respect to a radar-indicative characteristic of radar-like interference signals;
- b) allocating a quality parameter to each assessed frequency, the quality parameter indicating a probability that the frequency is occupied by a radar-like interference signal;
- c) selecting one or more frequencies in dependence on the allocated quality parameters; and
- d) further monitoring one or more frequencies with respect to radar-like interference signals.

18. (Previously Presented) The computer program product of claim 17, stored on a computer readable recording medium.

19. (Currently Amended) A wireless communication system comprising:

- a) a first unit for continuously or quasi-continuously monitoring and assessing one or more frequencies with respect to a radar-indicative characteristic of radar-like interference signals;
- b) a second unit for allocating a quality parameter to each assessed frequency, the quality parameter indicating a probability that a frequency is occupied by a radar-like interference signal;
- c) a third unit for selecting one or more frequencies in dependence on the allocated quality parameters, wherein the first unit is adapted to further monitor one or more frequencies with respect to radar-like interference signals.

20. (Original) The wireless communication system of claim 19, comprising a monitoring device (MD) associated with or remote from at least one of an access point (AP) or a central controller (CC),

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wherein the monitoring device (MD) includes at least the first unit for continuously or quasi-continuously monitoring and assessing one or more frequencies with respect to the radar-like interference signals.

21. (New) The method of claim 1, wherein when quasi-continuously monitoring the one or more frequencies a duration of a single measurement interval is long compared to a time interval between two subsequent measurement intervals.

22. (New) The wireless communication system of claim 19, wherein when quasi-continuously monitoring the one or more frequencies a duration of a single measurement interval is long compared to a time interval between two subsequent measurement intervals.

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